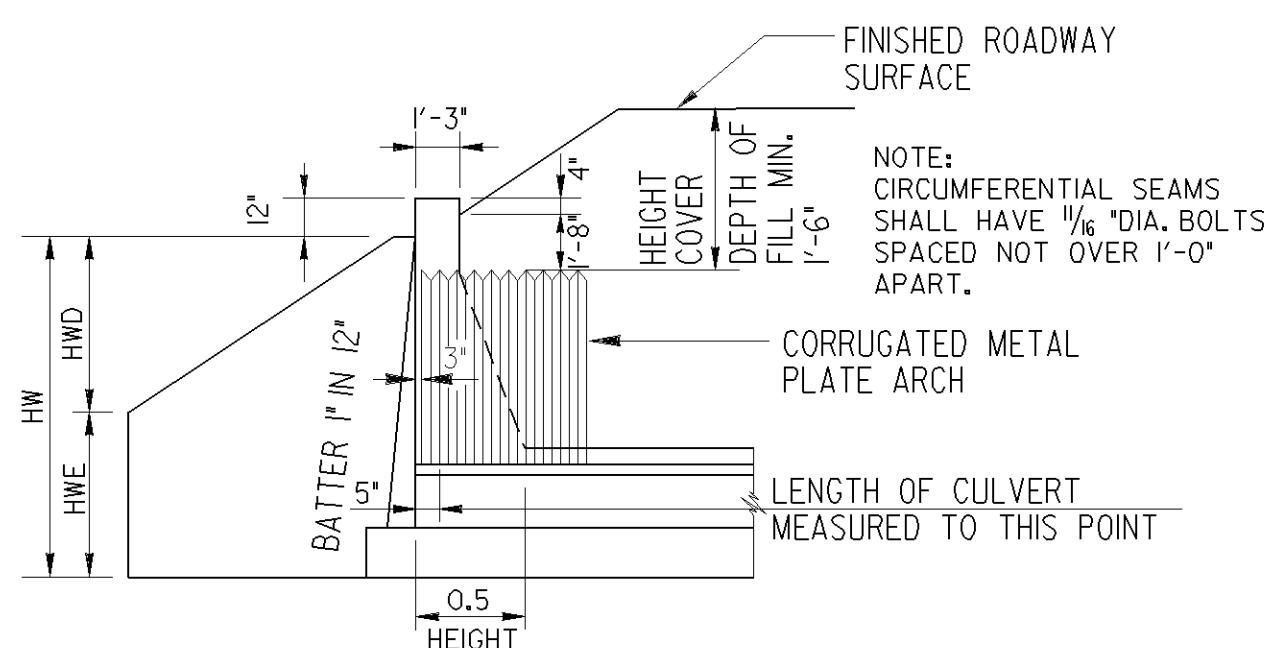
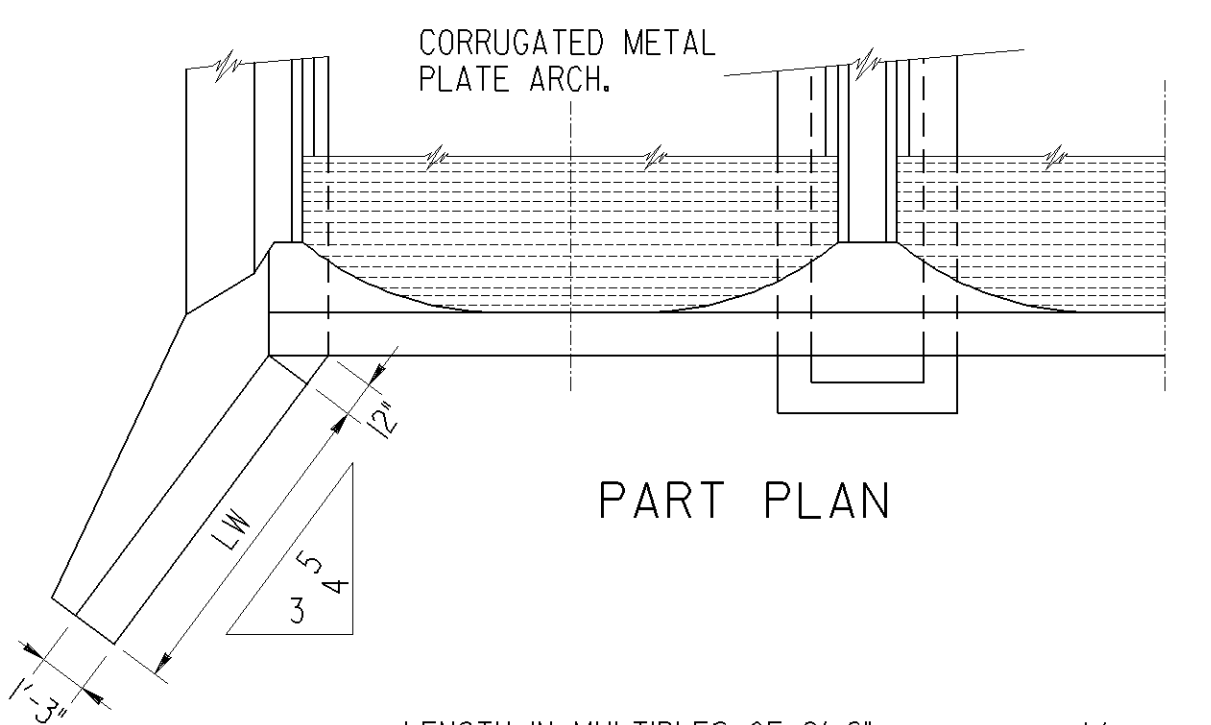


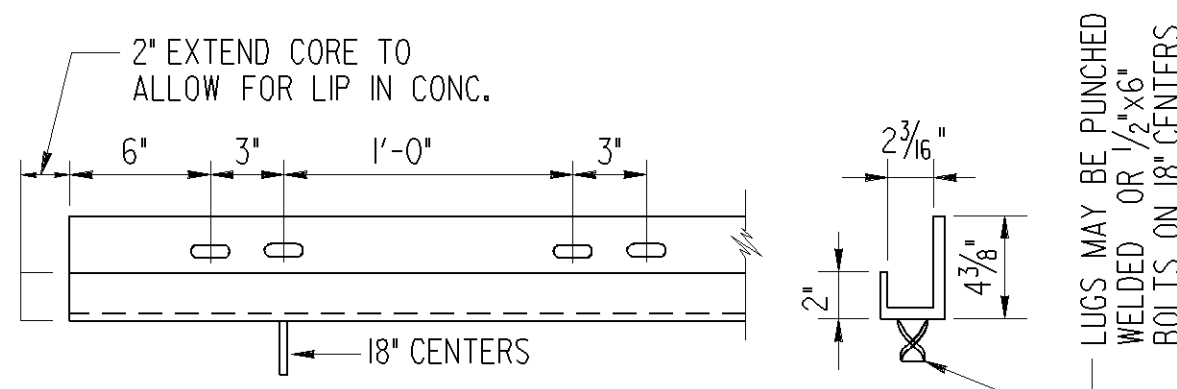
PART END ELEVATION



PART SECTION ON CL OF ARCH

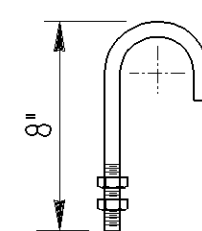


DETAIL OF 1/64 " (12 GA.) ANGLE



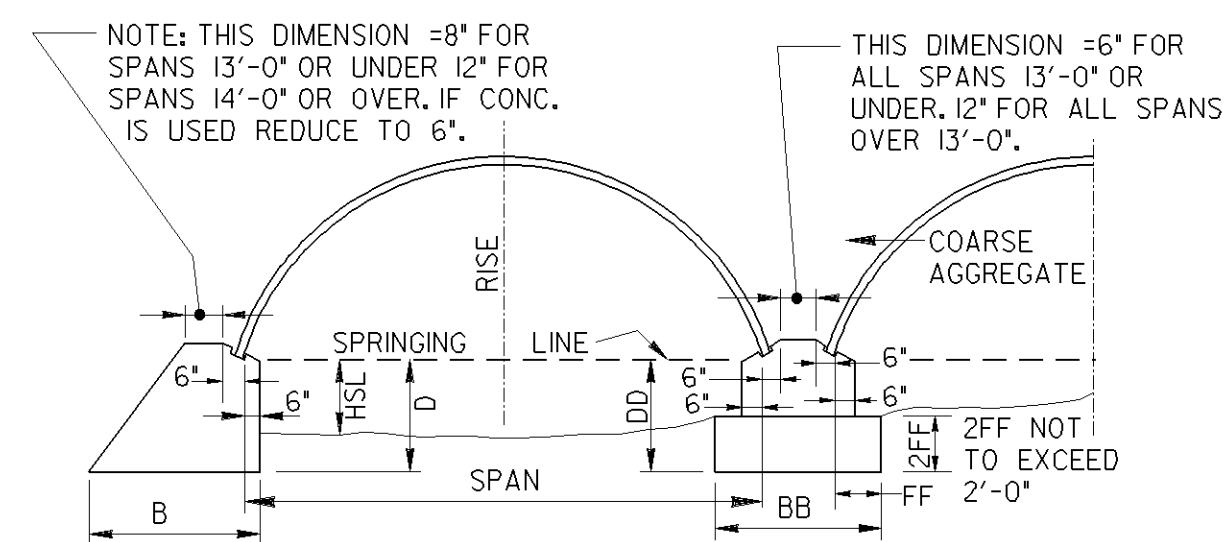
DETAIL OF 3/16 " ANCHOR CHANNEL

NOTE:
BEARING ANGLES SHALL BE USED FOR SPANS UP TO 12'-0", FOR SPANS OVER 12'-0" USE BEARING CHANNELS.

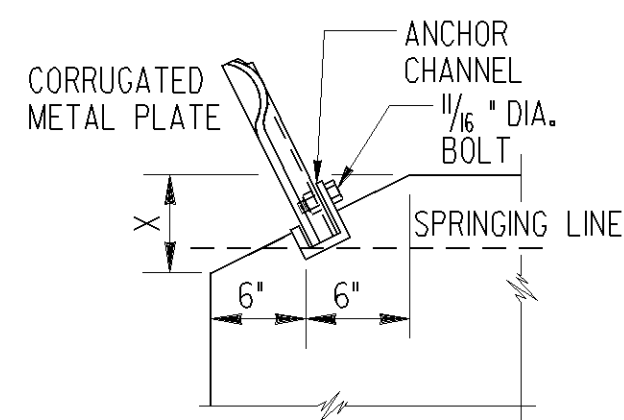


5/8" DIA. STANDARD HOOK BOLT

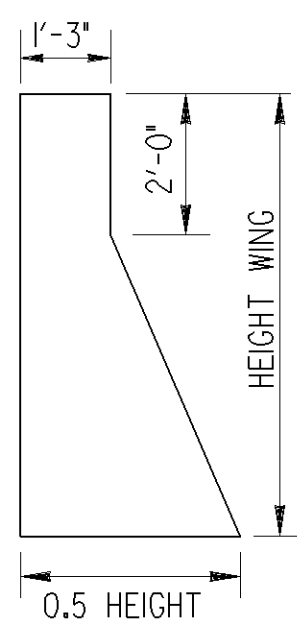
TO BE USED ON ALL SKEWED ARCHES TOGETHER WITH R.C. ARCH RING OR R.C. HEADWALL FOR SUPPORTING ENDS OF METAL ARCH.



LONGITUDINAL SECTION AT CL



DETAIL OF ARCH SEAT



TYP. WALL OR WING SECTION

GAUGE TABLE H-15										
SPAN FEET	HEIGHT OF COVER IN FEET									
	2	3	4	5	6	7	8	9	10	
7	10	10	10	10	10	10	10	10	10	
8	10	10	10	10	10	10	10	10	10	
9	8	10	10	10	10	10	10	10	10	
10	7	8	10	10	10	10	10	10	10	
11	7	8	10	10	10	10	10	8	8	
12	7	7	8	8	10	8	8	7	7	
13	5	7	7	8	8	8	7	7	5	
14	5	7	7	7	7	7	5	5	3	
15	3	5	5	7	7	5	5	5	3	
16	3	3	5	5	7	5	3	1	1	
17	1	1	3	5	5	3	3	1		
18	1	1	3	3	5	3	1	1		
19			1	1	3	1	1			
20			1	1	1					

NOTE:
USE NO. 12 GAUGE FOR ALL SPANS SHORTER THAN SHOWN IN TABLE. SEE INDEX NUMBER FOR LONGER SPANS.

U.S. STANDARD GAUGES
NO. 12 GAUGE = 1/64 "
NO. 10 GAUGE = 3/64 "
NO. 8 GAUGE = 1/16 "
NO. 7 GAUGE = 3/16 "
NO. 5 GAUGE = 1/32 "
NO. 3 GAUGE = 1/4 "
NO. 1 GAUGE = 1/32 "

QUANTITIES AND DIMENSIONS ONE WINGWALL				
HW	HWD	HWE	LW	CU.YDS.
5'-6"	2'-0"	3'-6"	3'-9"	1.168
6'-0"	2'-4"	3'-8"	4'-4"	1.455
6'-6"	2'-8"	3'-10"	5'-0"	1.880
7'-0"	3'-0"	4'-0"	5'-6"	2.286
7'-6"	3'-3"	4'-3"	6'-0"	2.740
8'-0"	3'-6"	4'-6"	6'-6"	3.269
8'-6"	3'-9"	4'-9"	7'-0"	3.869
9'-0"	4'-0"	5'-0"	7'-6"	4.538
9'-6"	4'-4"	5'-2"	8'-0"	5.247
10'-0"	4'-8"	5'-4"	8'-9"	6.160
10'-6"	5'-0"	5'-6"	9'-6"	7.185
11'-0"	5'-3"	5'-9"	10'-0"	8.274
11'-6"	5'-6"	6'-0"	10'-6"	9.290
12'-0"	5'-9"	6'-3"	11'-0"	10.478
12'-6"	6'-0"	6'-6"	11'-6"	11.763
13'-0"	6'-4"	6'-8"	12'-0"	12.769
13'-6"	6'-8"	6'-10"	12'-6"	14.481
14'-0"	7'-0"	7'-0"	13'-0"	15.970
14'-6"	7'-3"	7'-3"	13'-6"	17.674
15'-0"	7'-6"	7'-6"	14'-0"	19.486
15'-6"	7'-9"	7'-9"	14'-6"	21.426
16'-0"	8'-0"	8'-0"	15'-0"	23.057

SLOPE ANGLE OF ARCH SEAT	
FACE OF ABUTMENT	
RISE/SPAN R/S	DISTANCE X
0.50	0"
0.48	1/2"
0.46	1"
0.44	1 1/2"
0.42	2 1/8"
0.40	2 3/4"
0.38	3 3/8"
0.36	4"
0.34	4 3/4"
0.32	5 1/2"
0.30	6 3/8"
0.28	7 3/8"
0.26	8 3/8"
0.24	9 5/8"
0.22	11"

GENERAL NOTES

SPECIFICATIONS- GEORGIA STANDARD

FOUNDATIONS- SHALL BE CONSTRUCTED OF CEMENT MORTAR RUBBLE MASONRY UNLESS SPECIFIED OTHERWISE BY THE ENGINEER AS PROVIDED BELOW. IF IT IS FOUND NECESSARY TO VARY THE DEPTH "D" FROM THAT SHOWN ON PLANS, THE WIDTH "B" MUST BE VARIED IN THE SAME PROPORTION.

WALLS AND WINGS- SHALL BE CONSTRUCTED OF CEMENT MORTAR RUBBLE MASONRY UNLESS SPECIFIED OTHERWISE BY THE ENGINEER AS PROVIDED BELOW. BASE OF WINGS MAY BE RAISED OR LOWERED BY THE ENGINEER TO SUIT FOUNDATION CONDITIONS, BUT IN NO CASE SHALL WIDTH OF BASE OF WINGS OR WALLS BE LESS THAN 0.5 THE HEIGHT.

ARCH- SHALL BE CONSTRUCTED OF GALVANIZED CORRUGATED METAL PLATES OF THE GAUGE AND DIMENSIONS SHOWN ON THE PLANS OR PROPOSAL.

CONCRETE CLASS A- SHALL BE USED IN CASE THE ENGINEER DESIRES TO SUBSTITUTE MASS CONCRETE FOR RUBBLE MASONRY. ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4". IF CONCRETE IS USED REDUCE THICKNESS OF STRAIGHT SECTIONS OF WINGS AND SPANDREL WALLS TO 12" AND BUILD FACE OF SPANDREL FLUSH WITH ENDS OF METAL.

QUANTITIES- SHOWN ON PLANS ARE FOR ESTIMATING PURPOSES ONLY, AND PAYMENT SHALL BE MADE FOR EXACT QUANTITIES PLACED AS COMPUTED BY THE ENGINEER.

ANCHOR CHANNELS- HEAVY ASPHALT-COARSE AGGREGATE- AND OTHER APPURTENANCE NECESSARY FOR CONSTRUCTING METAL PLATE ARCH CULVERT NOT LISTED IN QUANTITIES SHALL NOT BE PAID FOR DIRECTLY BUT SHALL BE INCLUDED IN UNIT PRICE BID FOR CONTRACT ITEM.

ERECTION AND DRAINAGE- AFTER METAL PLATE ARCH HAS BEEN ASSEMBLED THE NOTCH IN ANCHOR CHANNEL SHALL BE FILLED WITH HEAVY ASPHALT 99.5% SOLUBLE IN CARBON BISULFIDE BEING SURE THAT THE UPPER LINE OF HOLES IN BASE PLATES ARE LEFT OPEN. IMMEDIATELY BACK OF THESE HOLES A LAYER OF COARSE AGGREGATE SHALL BE PLACED NOT LESS THAN 12" DEEP TO INSURE PROPER DRAINAGE. IF BASE PLATES ARE NOT REGULARLY FURNISHED WITH A DOUBLE LINE OF HOLES, THE MANUFACTURE SHALL PROVIDE 3/4" WEEP HOLES ON 6" CENTERS AND 3/2" FROM EDGES OF PLATES.

6-30-98	DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REDRAWN	REVISION	STANDARD CORRUGATED METAL PLATE ARCH CULVERTS SPANS 6'-0" TO 20'-0" INCLUSIVE	
BY	DES. _____ (SUBMITTED) TRA. _____ (APPROVED) CHK. _____	James A. Kennel STATE ROAD & AIRPORT DESIGN ENGINEER James L. Easley CHIEF ENGINEER	NUMBER 2010 SHEET 1 OF 2